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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HEWLETT-PARKARD COMPANY
Intellectual Property Administration
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EXAMINER

MANOSKEY, JOSEPH D

ART UNIT PAPER NUMBER

2113

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,283

Applicant(s)

WYLD, BRIAN

Examiner

Joseph Manoskey

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 9, 10, 12 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 9, 10, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Harper, U.S. Patent 6,675,316.

3. Referring to claim 9, Harper discloses multiple shared memory processor instances that communicate over an interconnection fabric, which is interpreted as a distributed multiprocessor system (See Fig. 1 and 4, and Col. 3, lines 13-14). The system has at least two hosts with a processor and internal memory (See Fig. 2). Harper also teaches the system having external memory nodes that are made reliable, "fault tolerant", (See Fig. 1 and 2, and Col. 4, lines 52-56), and the processor has access to the memory via a coherency control chipset, this is interpreted as a access device that provides transparent access since it provides access to both the L3 cache and the external memory (See Fig. 2 and 4).

4. Referring to claim 10, Harper teaches the system having access to the external memory in the range of tens of nanoseconds (See Col. 5, lines 21-22). This is interpreted as the system having an access time to the external memory within three orders of magnitude than an access time to the internal memory.

5. Referring to claim 12, Harper discloses the processor and coherency control chipset connected via a bus (See Fig. 2), which is interpreted as the access device in the host connected to a bus. Harper teaches the system having access to the external memory in the range of tens of nanoseconds (See Col. 5, lines 21-22). This is interpreted as access to the external memory taking place in less than one cycle of the bus.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper in view of Duso et al., U.S. Patent 6,625,750, hereinafter referred to as "Duso".

8. Referring to claim 15, Harper discloses all the limitations (See rejection of claim 9) including the external memory unit having a fault tolerant memory (See Fig. 1 and 2, and Col. 4, lines 52-56). Harper does not teach the external memory comprising at least two access server devices, each connected to the access device of a host and the fault tolerant memory connected to each server device, however Harper does express a desire to recover from faults that occur in a node of the network (See Col. 1, lines 17-23). Duso teaches a file server that contains stream servers connected to multiple hosts and to the memory; the stream servers are interpreted as access server devices (See Fig. 2). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the file server with multiple access servers of Duso with the access to external fault tolerant memory of Harper. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because the file server provides a failover services for memory node of a network (See Col. 1, lines 18-21).

9. Referring to claim 16, Harper and Duso teach all the limitations (See rejection of claim 15) including the fault tolerant memory comprising a request server connected to the server devices. Duso teaches the file server having controller servers, interpreted as request servers, connected to the streams servers, or access server devices (See Duso, Fig. 2).

10. Referring to claim 17, Harper and Duso disclose all the limitations (See rejection of claim 16) including the controller servers, or request servers, connected to adapters,

interpreted as memory controllers, and each adapter is connected to one or more memory arrays or banks (See Duso, Fig. 2).

Allowable Subject Matter

11. Claim 11 is allowed.

12. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments regarding claims 9, 10, and 12 on pages 4 and 5, filed 26 August 2004 have been fully considered but they are not persuasive.

The applicant argues that Harper teaches a symmetric processor system and not a distributed system. The examiner first wishes to point out that Harper uses the term SMP to mean shared memory processor and not the more familiar meaning of symmetric multi processor (See Col. 3, lines 8-14). The examiner respectfully disagrees with applicant's belief that the system is not a distributed system on a network, Harper teaches the system to a distributed shared memory system (See Col. 2, lines 9-17), therefore the network is in fact a network and not a bus, and the memory node is external memory to the other nodes (See Fig. 1 and 4).

14. Applicant's arguments, see page 5, filed 26 August 2004, with respect to claims 13 and 14 have been fully considered and are persuasive. The 35 U.S.C. 102(e) rejections of claims 13 and 14 have been withdrawn.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Manoskey whose telephone number is (571) 272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDM
November 19, 2004


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